

# MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

## BOARD AND CODE ADMINISTRATION DIVISION

### NOTICE OF ACCEPTANCE (NOA)

Poma & Sons, Inc. 2049 S.W. Poma Drive Palm City, Florida 34990

### Scope:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

**DESCRIPTION:** "G-602" Aluminum Glazed Railing System

**APPROVAL DOCUMENT:** Drawing No. 010-0005(F), titled "Aluminum Glazed Railing", sheets 1 through 4 of 4, prepared by Poma & Sons, Inc., dated June 14, 2012, signed and sealed by Timothy C. Boudah, P.E., on March 24, 2016, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

### MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. The structural adequacy of the supporting structures is not part of this approval & shall be reviewed by the corresponding Building Dept.

This NOA revises NOA # 10-1012.04 and consists of this page 1, evidence submitted page E-1 as well as approval document mentioned above.

The submitted documentation was reviewed by Helmy A. Makar, P.E., M.S.

(MIAMI-DADE COUNTY) | APPROVED Hely A. Melr Expir

NOA No. 16-0418.13 Expiration Date: 09/20/2017 Approval Date: 10/06/2016 Page 1

### NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

### 1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #10-1212.04

#### A. DRAWINGS

1. Drawing No. 010-0005(F), titled "Aluminum Glazed Railing", sheets 1 through 4 of 4, prepared by Poma & Sons, Inc., dated June 14, 2012, signed and sealed by Timothy C. Boudah, P.E., on June 18, 2012.

#### B. TESTS

- 1. Test per ANSI Z 97.1 and TAS 202, **Report No. 6090**, by Fenestration Testing Laboratory, Inc., dated June 14, 2010, signed and sealed by Jorge A. Causo, P.E.
- 2. Test per ANSI Z 97.1 and TAS 202, Report No. 6047, by Fenestration Testing Laboratory, Inc., dated June 10, 2010, signed and sealed by Jorge A. Causo, P.E.
- 3. Test per ANSI Z 97.1, **Report No. 6535**, by Fenestration Testing Laboratory, Inc., dated August 12, 2011, signed and sealed by Marlin D. Brinson, P.E.

### C. CALCULATIONS

1. Calculation titled "Aluminum Glazed Railing Style G-602", dated September 30, 2010, by Timothy C. Boudah, P.E., signed and sealed by Timothy C. Boudah, P.E.

### D. QUALITY ASSURANCE

1. By Miami-Dade County Department of Regulatory and Economic Resources.

#### E. MATERIAL CERTIFICATIONS

1. None.

#### 2. NEW EVIDENCE SUBMITTED

#### A. DRAWINGS

1. Drawing No. 010-0005(F), titled "Aluminum Glazed Railing", sheets 1 through 4 of 4, prepared by Poma & Sons, Inc., dated June 14, 2012, signed and sealed by Timothy C. Boudah, P.E., on March 24, 2016.

#### B. TESTS

1. None.

#### C. CALCULATIONS

1. Calculation titled "Poma Aluminum Glazed Railing Style G-602", dated March 24, 2016, by Timothy C. Boudah, P.E., signed and sealed by Timothy C. Boudah, P.E.

#### D. OUALITY ASSURANCE

1. By Miami-Dade County Department of Regulatory and Economic Resources.

#### E. MATERIAL CERTIFICATIONS

1. None.

Helmy A. Makar, P.E., M.S. Product Control Section Supervisor

rroduct Control Section Supervisor NOA No. 16-0418.13

**Expiration Date: 09/20/2017 Approval Date: 10/06/2016** 

# **GENERAL NOTES:**

#### MATERIALS:

- A. ALUMINUM FRAMING ELEMENTS TO CONSIST OF ABLOY 6061, 6005, 6063 (TEMPER TS OR T6) WITH MINIMUM MECHANICAL PROPERTIES SPECIFIED IN TABLE A.3.4 OF THE 2010 ALUMINUM DESIGN MANUAL AS PUBLISHED BY THE ALUMINUM ASSOCIATION, INC., ARLINGTON,
- B. MECHANICAL FASTENERS TO BE TYPE 304, 316 OR 410 STAINLESS STEEL UNLESS OTHERWISE NOTED
- C. WELD FILLER ALLOYS SHALL MEET AWS AS.10 STANDARDS, AND AS A MINIMUM, SHALL CONSIST OF ALUMINUM ALLOY 4043 (100% Ar) PER

- A. ALL ALUMINUM RAILINGS/GUARDRAILS TO RECEIVE BAKED-ON PAINTED FINISH OVER FULL PRETREATMENT SYSTEM OR WHEN SPECIFIED TO BE NATURAL/MILL FINISH OR WHEN ANODIZING IS SPECIFIED.
- NOTE: ANODIZING IS NOT RECOMMENDED FOR WELDED RAILINGS DUE TO THE LIKELIHOOD OF DISCOLORATION FROM: 1) DISSIMILAR ALLOYS, 2) DISSIMILAR TEMPERS, 3) OXIDATION, 4) WELDING FILLER METALS, 5) WELD HEAT ZONES, 6) MARRING CAUSED DURING
- B. PRETREATMENT PROCESS: A MULTISTAGE PRETREATMENT PROCESS IS REQUIRED PRIOR TO APPLICATION OF PAINT SYSTEM.
- 1. THE PRODUCT SHALL BE DIPPED OR SPRAYED IN A CONCENTRATED HEATED ACIDIC CLEANER THIS PROCESS PROVIDES CLEANING, DEGREASING AND DEEP ETCHING OF THE MATERIAL SURFACE
- 2. THEN RINSED IN CLEAR WATER.
- 3. THE PRODUCT SHALL THEN BE DIPPED OR SPRAYED IN A CONCENTRATED ACIDIC TREATMENT TO DEOXIDIZE, DESMUT AND NEUTRALIZE
- 4. THE PRODUCT SHALL THEN BE SPRAYED DIPPED OR SPRAYED IN A VIRGIN R.O. WATER RINSE (ELIMINATES THE POSSIBILITY OF THE ACIDIC CLEANER DRYING UP ON THE ALUMINUM SURFACE WHICH CAN BE HARMFUL TO THE PRETREATMENT PROCESS).
- 5. THE PRODUCT SHALL THEN 8E DIPPED OR SPRAYED IN NON-CHROME CONVERSION COATING TO ACT AS A BOND COATING FOR PAINT ADHESION.
- 6. THE PRODUCT MUST BE COMPLETELY DRY PRIOR TO PAINTING.

ONE OF THE FOLLOWING ELECTROSTATIC SPRAY PAINTING (E.S.P.) SYSTEMS SHALL BE APPLIED.

- E.S.P. APPLIED SUPERDURABLE POLYESTER THERMOSETTING RESIN OVER PRETREATMENT BOND COATING. PAINT TO BE 1.5 - 3 MILS. PAINT SHALL BE BAKED ON AT 400 DEGREES FOR A MIN. DURATION OF 10 MINUTES. PAINT TO BE "TIGER DRYLAC" SERIES 38 SUPERDURABLE POLYESTER THERMOSETTING RESIN OR EQUAL.
- NOTE: POWDER COATINGS AVAILABLE IN POMA CONSTRUCTION CORP. STANDARD COLORS AND MANUFACTURERS STANDARD COLORS. "TIGER DRYLAC" SERIES 38 SYSTEM OR EQUAL MEET. AAMA 2604 SPECIFICATIONS AND HAVE A 5 YEAR DURABILITY RATING.
- E.S.P. APPLIED HIGH PERFORMANCE FLUOROPOLYMER (PVDF) "KYNAR" FINISH. ALUMINUM RAILINGS SHALL BE CLEANED WITH INHIBITED CHEMICALS AND THE SURFACE SHALL BE CHEMICALLY CONVERTED TO AMORPHOUS CHROMIUM PHOSPHATE TO CONFORM WITH ASTM D 1730. TYPE B, METHOD 5, PRIOR TO COATING. APPLY MANUFACTURERS 2-COAT THERMOCURED SYSTEM COMPOSED OF SPECIALLY FORMULATED INHIBITED PRIMER AND FLUOROPOLYMER COLOR COAT WITH COLOR COAT CONTAINING NOT LESS THAN 70% POLYVINYLIDENE FLUORIDE RESIN BY WEIGHT. PAINT TO HAVE 1.0 -1.2 MILS DRY FILM THICKNESS. PAINT SHALL BE BAKED ON AT 475 DEGREES FOR A DURATION OF 10 MINUTES. SUBSTRATE TEMPERATURE SHALL REACH 450 DEGREES FOR A DURATION OF 5 MINUTES. PAINT TO BE "PPG'S" DURANAR HIGH PERFORMANCE PVDF SYSTEM OR EQUAL MEET AAMA 2604 SPECIFICATIONS AND HAVE A 5 YEAR DURABILITY RATING.
  - NOTE: HIGH PERFORMANCE FLUOROPOLYMER (PVDF) "KYNAR" FINISHES ARE AVAILABLE IN POMA CONSTRUCTION CORP. STANDARD COLORS AND MANUFACTURERS STANDARD COLORS. PAINT TO BE "PPG'S" DURANAR HIGH PERFORMANCE PVDF SYSTEM OR EQUAL WHICH MEET AAMA 2604 SPECIFICATIONS AND HAVE A 5 YEAR DURABILITY RATING.
- E.S.P. APPLIED HIGH PERFORMANCE FLUOROPOLYMER (PVDF) "KYNAR" FINISH WITH XL COATING. ALUMINUM RAILINGS SHALL BE CLEANED WITH INHIBITED CHEMICALS AND THE SURFACE SHALL BE CHEMICALLY CONVERTED TO AMORPHOUS CHROMIUM PHOSPHATE TO CONFORM WITH ASTM D 1730. TYPE B, METHOD 5, PRIOR TO COATING. APPLY MANUFACTURERS STANDARD 3-COAT THERMOCURED SYSTEM COMPOSED OF SPECIALLY FORMULATED INHIBITED PRIMER, FLUOROPOLYMER COLOR COAT AND FLUOROPOLYMER TOP COAT WITH COLOR COAT AND TOP COAT CONTAINING NOT LESS THAN 70% POLYVINYLIDENE FLUORIDE RESIN BY WEIGHT. PAINT TO HAVE 1.6-1.8 MILS DRY FILM THICKNESS. PAINT SHALL BE BAKED ON AT 475 DEGREES FOR A DURATION OF 10 MINUTES. SUBSTRATE TEMPERATURE SHALL REACH 450 DEGREES FOR A DURATION OF 5 MINUTES. PAINT TO BE "PPG'S" DURANAR HIGH PERFORMANCE PVDF SYSTEM OR EQUAL MEET AAMA 2605 SPECIFICATIONS AND HAVE A 10 YEAR DURABILITY RATING.
- NOTE: HIGH PERFORMANCE FLUOROPOLYMER (PVDF) "KYNAR" FINISHES ARE AVAILABLE IN POMA CONSTRUCTION CORP. STANDARD COLORS AND MANUFACTURERS STANDARD COLORS. PAINT TO BE "PPG'S" DURANAR HIGH PERFORMANCE PVDF SYSTEM WITH XL COATING OR EQUAL WHICH MEET AAMA 2605 SPECIFICATIONS AND HAVE A 10 YEAR
- ADDITIONAL NOTES: UPON REQUEST FIVE, TEN AND (IN CERTAIN GEOGRAPHICAL LOCATIONS) 15 YEAR WARRANTIES ARE OBTAINABLE AT ADDITIONAL COSTS. ADDITIONALLY, CUSTOM COLORS ARE OBTAINABLE AT ADDITIONAL COSTS.

SHOP FABRICATION AND ASSEMBLY SHALL BE DONE IN ACCORDANCE WITH POMA CONSTRUCTION CORP. STANDARDS WITH THE DETAILS SPECIFICALLY AS SHOWN AND NOTED ON THESE DRAWINGS. SHOP CONNECTIONS SHALL BE DONE IN A NEAT, WORKMANLIKE MANNER UTILIZING THE MIG AND/OR TIG WELDING PROCESSES. HORIZONTAL CHANNELS SHALL BE PUNCHED TO RECEIVE PICKETS AND ALL WELDS IN THIS APPLICATION SHALL BE CONCEALED FROM NORMAL VIEW WHEN POSSIBLE. EXPOSED WELDS WILL BE GROUND ONLY AS NOTED ON THESE DRAWINGS. ANY WELDS NOT SPECIFICALLY SHOWN OR NOTED WILL BE SIZED AND LOCATED BY POMA CONSTRUCTION CORP. TO ENSURE PROPER FABRICATION. ALL POSTS SHALL BE FIRMLY ATTACHED TO THE HORIZONTAL MEMBERS TO ASSURE FIXED FASTENING FOR THE LIFE OF THE RAILING SYSTEM. CORNERS SHALL BE HAIRLINE FITTED AND WELDED TO INSURE MAXIMUM STRENGTH DURING USAGE AND NORMAL BUILDING EXPANSION AND CONTRACTION. THESE WELDS WILL BE GROUND SMOOTH IF EXPOSED.

DELIVER AND STORE ALL RAILING SECTIONS AND COMPONENTS IN A DRY AND SAFE LOCATION PROVIDED BY THE GENERAL CONTRACTOR OR OWNER. HANDLE RAILINGS WITH EXTREME CARE TO AVOID MARRING THE FINISHED PRODUCT.

BALCONY RAILINGS AND GUARDRAILS SHOULD BE INSTALLED FROM THE TOP FLOOR DOWN AND ONLY WHEN ALL PAINTING AND MASONRY WORK IS COMPLETED. SET EACH RAILING POST IN CORE/HAMMER DRILLED, SLEEVED OR BLOCKED OUT HOLES AND SECURE WITH A NON SHRINK, NON METALLIC, STRUCTURAL GROUT, OR ENGINEER APPROVED ALTERNATE, OR BY POMA CONSTRUCTION CORP.'S STAINLESS STEEL ANCHOR PIN INSERT, WHICH WILL BE INSTALLED BY MEANS OF HAMMER DRILLING OR CORE DRILLING A 1 3/4" MINIMUM TO 3 1/2" MAXIMUM DIAMETER HOLE, NOT LESS THAN 1/4" DEEPER THAN THE REQUIRED ANCHOR PIN EMBEDMENT DEPTH, AS DETAILED AND NOTED IN THESE DRAWINGS.

CLEAN HOLE OF ANY LOOSE MATERIAL, PLACE ALUMINUM RAILING POST WITH STAINLESS STEEL ANCHOR PIN INSERT IN HOLE AND FILL SPACE WITH HIGH STRENGTH EPOXY AND SAND FILLER, MIXED AND PLACED TO COMPLY WITH ANCHORING MATERIAL MANUFACTURER'S DIRECTIONS.

NOTE: THIS IS THE RECOMMENDED METHOD OF INSTALLATION OF POMA RAILING STYLE G-602 RAILING OR GUARDRAIL SYSTEM FOR ANY HIGH RISE BUILDING CONSTRUCTION, AND MORE IMPORTANTLY, ALL STRUCTURES LOCATED NEAR OR WITHIN A CORROSIVE ENVIRONMENT.

FIELD SPLICE LOCATIONS OF TOP AND BOTTOM RAILS SHALL BE DETERMINED BY POMA CONSTRUCTION CORP. TO BEST ACCOMMODATE FABRICATION, PAINTING, SHIPPING AND INSTALLATION. FIELD SPLICES SHALL BE ACCOMPLISHED BY BUTTING THE TOP CAP OF ONE SECTION TO ANOTHER, USING AN INTERIOR SLEEVE INSERT OR CONCEALED TAB CONNECTION AND FURTHER SECURED BY MEANS OF STAINLESS STEEL FASTENERS, OR NON FERROUS, SELF EXPANDING RIVETS. IT SHOULD BE NOTED THAT, ALTHOUGH ALL FIELD SPLICES WILL BE DONE IN A WORKMAN LIKE MANNER, THESE JOINTS WILL BE VISIBLE UPON COMPLETION AND WILL REQUIRE A MIN. GAP OF 1/8" PER TWENTY FOOT SECTION OF TOP OR BOTTOM RAIL, TO ALLOW FOR EXPANSION AND CONTRACTION OF RAILINGS AND/OR STRUCTURE.

#### **EXISTING HOST STRUCTURE QUALIFICATION NOTES:**

- 1. GENERAL CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND INSTALLING BACKING IF AND WHERE NECESSARY FOR INSTALLATION OF RAILINGS TO BUILDING SUBSTRATE.
- 2. IT IS ASSUMED THAT THE GENERAL CONTRACTOR HAS VERIFIED THE EXISTING HOST STRUCTURE HAS BEEN DESIGNED AND CONSTRUCTED TO SAFELY SUPPORT THE LOADS IMPOSED BY THE RAILING SYSTEM.
- 3, IT IS RECOMMENDED THAT THE GENERAL CONTRACTOR REVIEW AS-BUILT CONSTRUCTION RECORDS FOR THE EXISTING HOST STRUCTURE AND/OR VERIFY IF EXISTING SLABS ARE PROVIDED WITH ADEQUATE SLAB REINFORCING STEEL.
- 4. POMA RECOMMENDS THAT IN-SITU CONCRETE SAMPLING AND CORE TESTS BE PERFORMED BY LICENSED CONCRETE TESTING FIRM TO DETERMINE ACTUAL CONCRETE COMPRESSIVE STRENGTH OF EXISTING CONCRETE BALCONY SLABS.
- 5. SEE TABLE NO. 2 FOR GENERAL GUIDELINES BETWEEN WIND DESIGN PRESSURE LIMITS AND MINIMUM REQUIRED CONCRETE COMPRESSIVE STRENGTH (F'c), FOR DESIGNATED RAILING INSTALLATION CONDITIONS.

#### **CLEANING AND PROTECTION:**

- A. ON DELIVERY ALL RAILING / GUARDRAILS WILL HAVE A PROTECTIVE COVERING OVER THE TOP HANDRAIL CAP ONLY. IMMEDIATELY UPON COMPLETION OF INSTALLATION OF RAILING, INSTALLER SHALL REMOVE PROTECTIVE COVER AND CLEAN ALL WORK FOR INSPECTION AND APPROVAL.
- B. AFTER INSTALLATION GENERAL CONTRACTOR OR OWNER SHALL BE RESPONSIBLE FOR PROTECTING RAILINGS DURING BALANCE OF CONSTRUCTION
- C. PAINTED ALUMINUM SURFACES SHALL BE CLEANED WITH PLAIN WATER CONTAINING A MILD SOAP OR DETERGENT. NO ABRASIVE AGENTS OR HARSH CHEMICALS ARE TO BE USED.
- NOTE: ALL RAILINGS REQUIRE PERIODIC MAINTENANCE ESPECIALLY THOSE SUBJECT TO OCEAN SALT AIR OR HARMFUL CHEMICAL ENVIRONMENTS (WITHIN 1/2 MILE), WHICH REQUIRE WASHING A MINIMUM OF ONCE EVERY (6) MONTHS. APPLICATION OF AN APPROVED UV PROTECTANT AFTER WASHING IS RECOMMENDED.

#### APPLICABLE GOVERNING BUILDING CODES:

ALL RAILINGS AND GUARDRAILS SHOWN IN THIS PRODUCT APPROVAL DOCUMENT ARE SHOP FABRICATED AND ASSEMBLED TO WITHSTAND LOADS REQUIRED BY THE 5TH EDITION (2014) FLORIDA BUILDING CODE-BUILDING AS THEY PERTAIN TO VARIOUS RAILING AND GUARDRAIL LOADING CONDITIONS CONSISTENT WITH SECTION 1607.8.1, AND

A. SECTION 1618.4.6.3 SAFETY GLAZING; GLASS PANEL ASSEMBLY CAPACITY AT TWO TIMES (2x) MAXIMUM DESIGN WIND PRESSURE (AS REQUIRED BY MIAMI-DADE BCCO CHECKLIST #0460) HAS BEEN VERIFIED BY TESTING PERFORMED AT FENESTRATION TESTING LABORATORY, INC. (FTL), REPORT FILE #09-596 AND FILE #10-596, IN ACCORDANCE WITH TEST APPLICATION STANDARD TAS 202. GLAZING DYNAMIC IMPACT LOADING (ANSI Z97.1) TESTS FOR LAMINATED GLASS PANELS HAVE BEEN PERFORMED BY FTL, REPORT FILE #11-596 (LAB. #6535) REMAIN IN CONFORMANCE WITH 2014 FLORIDA BUILDING CODE-BUILDING, FOR HVHZ SPECIAL LOAD CONSIDERATIONS.

PRODUCT REVISED as complying with the Florida **Building Code** Acceptance No 16 -

MAXIMUM ALLOWABLE WIND DESIGN PRESSURE = +146 PSF & -146 PSF BASED ON PARAMETERS SHOWN IN TABLE 1 & 2 ON SHEET 4 OF 4

Timothy C. Boudah, P.E.

9 E 602

STRUCTURAL DESIGN SER 514 S# PORT ST. LUCE BYD, PORT ST. LUCE, PHONE (T72)398-0342 FAX: (772)398-

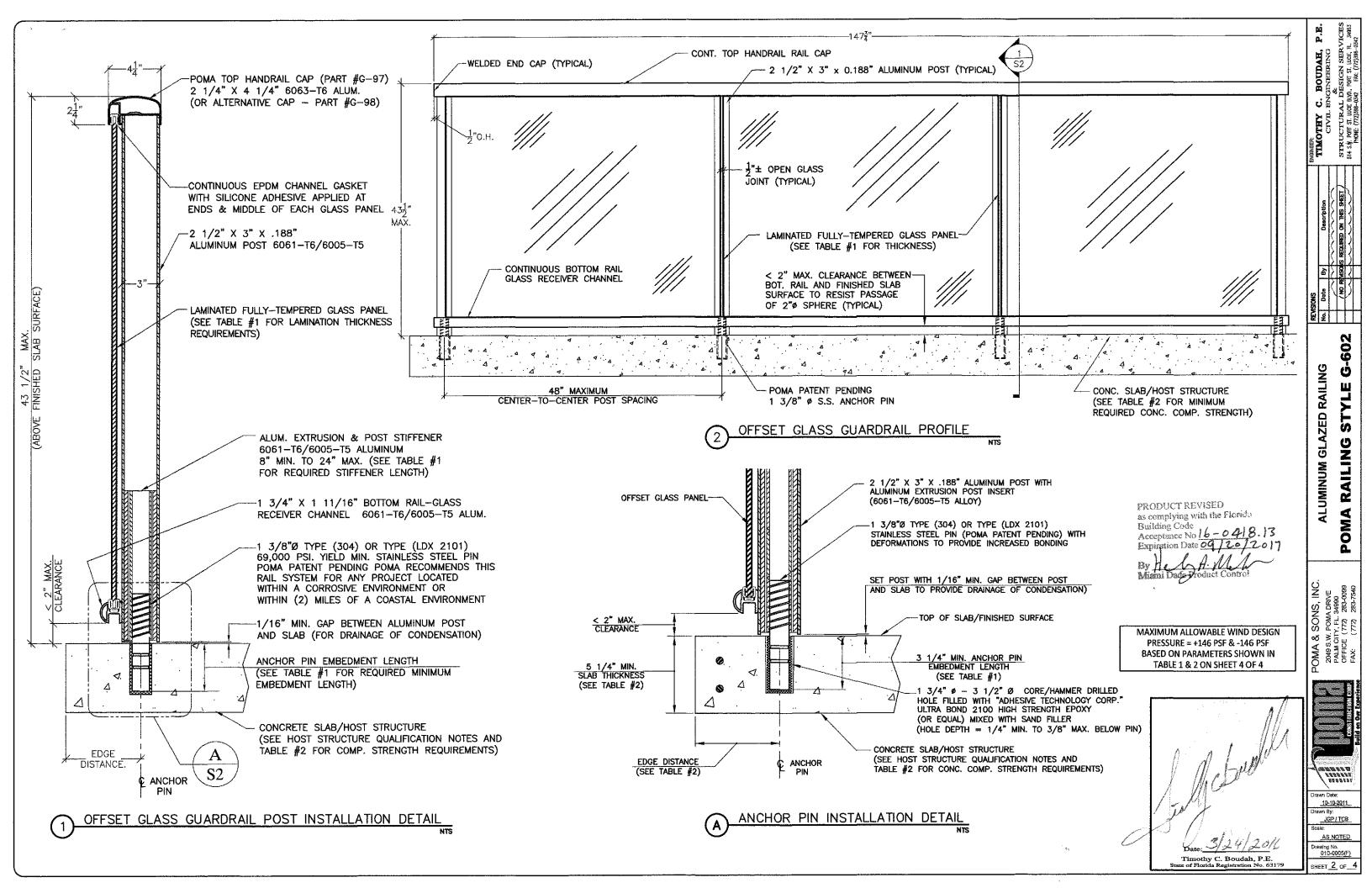
**ALUMINUM GLAZED RAILING** STYLI RAILING **POMA** 

Server Legard Herrey

06-14-2012 JGP / TCB

NO SCALE rawing No. 010-050<u>5(F)</u>

HEET 1 OF 4



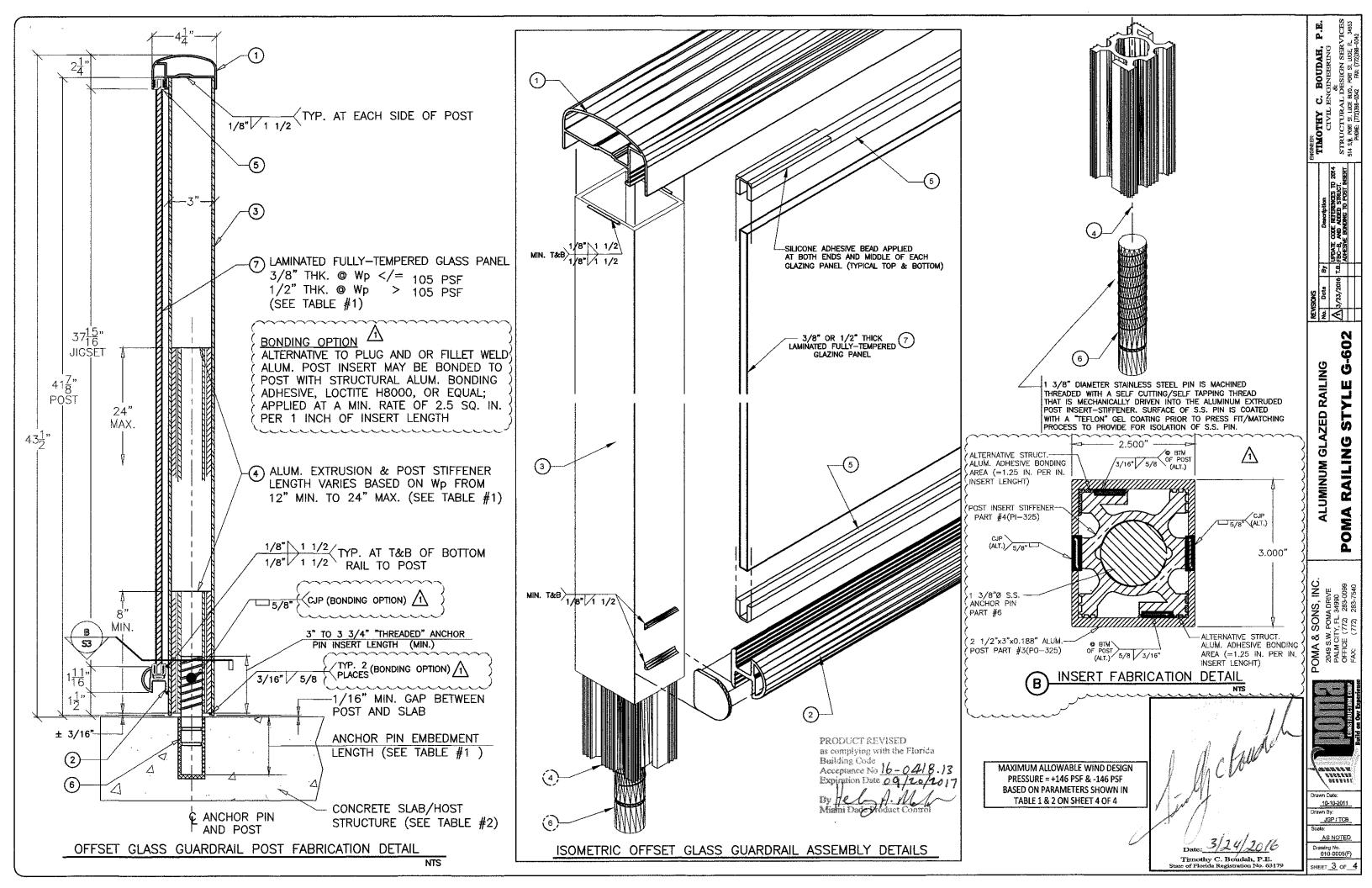


TABLE 1:	IVAI	LING STY							
RAILING FABRICATION VARIABLE		MAXIMUM DESIGN WIND PRESSURES, Wp (NEG. OR POS.)							
		=81.5PSF</th <th>90 PSF</th> <th>100 PSF</th> <th>110 PSF</th> <th>120 PSF</th> <th>130 PSF</th> <th>140 PSF</th> <th>146 PSF</th>	90 PSF	100 PSF	110 PSF	120 PSF	130 PSF	140 PSF	146 PSF
POST INSERT STIFFENER LENGTH	(MIN.)	12 INCHES	12	12	12	14	16	20	24
ANCHOR PIN EMBEDMENT LENGTH	(MIN.)	3 1/4 INCHES	3 1/2	3 3/4	3 3/4	4	4	4 1/4	4 1/4
ANCHOR PIN "THREADED" INSERT LENGTH	(MIN.)	3 INCHES	3	3	3	3	3 3/4	3 3/4	3 3/4
ANCHOR PIN LENGTH	(MIN.)	6 1/2 INCHES	6 3/4	7	7	7 1/4	8	8 1/4	8 1/4
LAMINATED GLASS PANEL THICKNESS (NEE NOTE #3)	OMINAL)	3/8 INCHES	3/8	3/8	1/2	1/2	1/2	1/2	1/2

- 1. INTERPOLATION BETWEEN DESIGNATED WIND DESIGN PRESSURES IS NOT ALLOWED. USE HIGHEST WIND DESIGN PRESSURE BETWEEN ANY TWO DESIGNATED PRESSURE VALUES.
- 2. MINIMUM REQUIRED ALLOWABLE YIELD STRENGTH (F'y) OF 1 3/8" DIAMETER STAINLESS STEEL ANCHOR PIN:

WIND DESIGN PRESSURE </= 105 PSF F'y (PSI) 75,000

3. LAMINATED GLASS PANELS CONSIST OF:

- A) 3/8" NOMINAL GLAZING PANEL: LAMINATED FULLY-TEMPERED GLAZING CONSISTING OF (0.035" DuPont SentryGlas) IONOPLAST STRUCTURAL INTERLAYER BONDED BETWEEN TWO LAYERS OF 3/16" THICK FULLY-TEMPERED CLASS PANELS = TOTAL 13/32" ACTUAL COMPOSITE THICKNESS.
- B) 1/2" NOMINAL GLAZING PANEL: LAMINATED FULLY-TEMPERED GLAZING CONSISTING OF (0.035" DuPont SentryGlas) IONOPLAST STRUCTURAL INTERLAYER BONDED BETWEEN TWO LAYERS OF 1/4" THICK FULLY-TEMPERED GLASS PANELS = TOTAL 17/32" ACTUAL COMPOSITE THICKNESS.

TABLE 2: ANCHOR PIN & CONCRETE SLAB GUIDELINES

MAXIMUM DESIGN WIND PRESSURE, Wp (NEG. OR POS.) PSF	ANCHOR PIN EMBEDMENT LENGTH (Hef)	ANCHOR PIN EDGE DISTANCE (Ca1)	SLAB THICKNESS (Ha)	CONCRETE COMPRESSIVE STRENGTH (F°c)
=/< 81.5	3 1/4 INCHES	6 INCHES	5 3/4 INCHES	4,800 PSI
90	3 1/2	6	6	4,600
100	3 3/4	6	6 1/4	4,400
110	3 3/4	6	6 1/2	4,900
120	4	6	6 1/2	4,900
130	4	6	6 7/8	5,150
140	4 1/4	6	6 7/8	5,100
146	4 1/4	6	7 1/8	5,200

TABLE 2 NOTES:

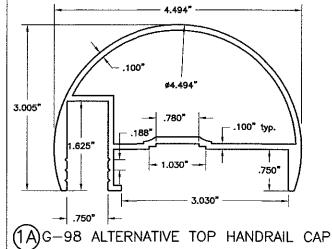
- ALL DIMENSIONS AND CONCRETE COMPRESSIVE STRENGTH NOTED IN TABLE 2 REPRESENT MINIMUM VALUES.
- Acceptance No 16 04/8 · 13 Expiration Date 09/20/20/7 TABLE 2 IS PROVIDED ONLY AS A GUIDELINE, TO SHOW REQUIRED RELATIONSHIP BETWEEN ANCHOR PIN EMBEDMENT LENGTH, ANCHOR PIN EDGE DISTANCE, SLAB THICKNESS, AND SLAB COMPRESSIVE STRENGTH AT THE DESIGN WIND PRESSURE.
  - 3. EXISTING CONDITIONS OF THE HOST STRUCTURE/BALCONY SLAB AND THE ACTUAL CONCRETE COMPRESSIVE STRENGTH MUST BE DETERMINED BY THE GENERAL CONTRACTOR, E.O.R., OR OTHERS, AND PROVIDED TO POMA BEFORE ANCHOR PIN EMBEDMENT LENGTH AND MINIMUM EDGE DISTANCE CAN BE DETERMINED.
  - 4. INTERPOLATION BETWEEN DESIGNATED WIND DESIGN PRESSURES IS NOT ALLOWED. USE HIGHEST WIND DESIGN PRESSURE BETWEEN ANY TWO DESIGNATED PRESSURE VALUES.

RAILING FABRICATION REQUIREMENT NOTES

- 1. THE ALUMINUM GLAZED RAILING STYLE G-602 AS PRESENTED IN THIS PRODUCT APPROVAL DOCUMENT HAVE BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 5th EDITION (2014) FLORIDA BUILDING CODE-BUILDING BY TESTING PERFORMED AT FENESTRATION TESTING LABORATORY, INC., REPORT FILE #09-596 AND FILE #10-596.
- 2. STRUCTURAL CALCULATIONS USED TO VERIFY CAPACITY OF THE RAILING STYLE G-602 ALUMINUM FRAMING ELEMENTS AND THEIR ATTACHMENTS ARE BASED ON ALLOWABLE STRESS DESIGN (ASD) PRINCIPLES IN ACCORDANCE WITH PART 1 DESIGN REQUIREMENTS OF THE 2010 ALUMINUM DESIGN MANUAL (ADM), AUTHORED BY THE ALUMINUM ASSOCIATION, INC., ARLINGTON, VIRGINIA.
- 3. ALLOWABLE STRESSES OF ALUMINUM FRAMING MEMBERS HAVE BEEN DETERMINED IN ACCORDANCE WITH THE 2010 ADM, PART VI. NO INCREASE IN ALLOWABLE STRESSES HAVE BEEN APPLIED CONSISTENT WITH THE
- 4. GLAZED PANELS CONSIST OF LAMINATED FULLY-TEMPERED GLASS MANUFACTURED IN COMPLIANCE WITH CPSC 16 CFR 1201, CATEGORY CLASSIFICATION II, AS REQUIRED BY THE 2014 FBC- BUILDING, SECTION 2407.1. AND TESTED FOR DYNAMIC IMPACT LOADING IN ACCORDANCE WITH ANSI 297.1, TO MEET SAFETY GLAZING REQUIREMENTS AS SPECIFIED IN SECTION 1618.4.6.3, OF THE 2014 FBC- BUILDING CODE.

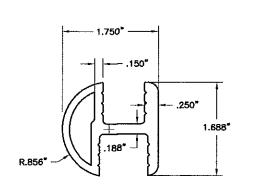
MAXIMUM ALLOWABLE WIND DESIGN PRESSURE = +146 PSF & -146 PSF **BASED ON PARAMETERS SHOWN IN** TABLE 1 & 2 ON SHEET 4 OF 4

# .100" typ. 2.250 1.625\* .100" typ. .750 G-97 TOP HANDRAIL CAP



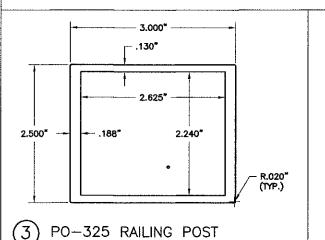
PRODUCT REVISED as complying with the Florida

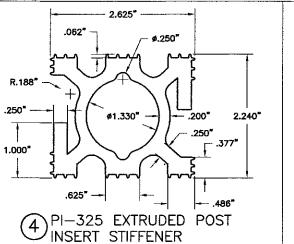
**Building Code** 



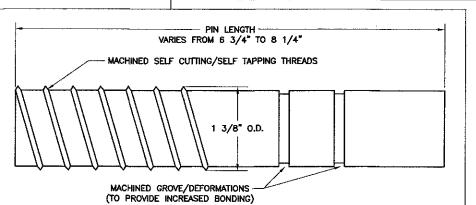
G-55 BOTTOM RAIL GLASS RECEIVER CHANNEL

	FABRICATION PARTS LIST							
ITEM NUMBER	PART NUMBER	PART NAME	ALLOY	REMARKS				
1	G-97	TOP HANDRAIL CAP	6063-T6					
(IA)	G-98	TOP HANDRAIL CAP	6063-T6	ALTERNATIVE CAP				
2	G55	BOTTOM RAIL-GLASS RECEIVER CHANNEL	6061-T6 (OR) 6005-T5					
3	P0-325	RAILING POST	6061-T6 (OR) 6005-T5					
4	P1-325	EXTRUDED POST INSERT—STIFFENER	6061-T6 (OR) 6005-T5					
5	EPDM 38	EPDM CHANNEL GASKET	N/A					
6	S.S. PIN	1 3/8"# ANCHOR PIN	N/A	SEE TABLE #1 FOR TENSILE YELD STRENGTH REQUIREMENTS				
7	GLASS PANEL	LAMINATED FULLY TEMPERED GLASS	N/A	SEE TABLE #1 FOR MINIMUM GLASS THICKNESS				





(5)EPDM-38 EPDM CHANNEL GASKET



S.S. PIN: STAINLESS STEEL ANCHOR PIN TYPE LDX 2101 OR A.I.S.I. TYPE 304

Timothy C. Boudah, P.E.

CIVIL ENGINEERING
&
STRUCTURAL DESIGN SER
514 SM. PORT ST. LUCE BYD., PORT ST. LUCE
PHONE (772)398-6342 F.K. (772)398 TIMOTHY 13 By

BOUDAH, GINEERING

ri N

REVISIONS
No. Date

A 3/23/2016 **G-602** 

ALUMINUM GLAZED RAILING STYLE RAILING

2049 S.W. POMA DRIVE PALM CITY, FL. 34990 OFFICE (772, 283-0999 FAX: (772, 283-7540

10-10-2011 JGP / TCB

AS NOTED HEET 4 OF 4